DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-017705 Address: 333 Burma Road **Date Inspected:** 02-Nov-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Liu Hua Jie **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: OBG** Segments

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dan Hernandez was present during the times noted above to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

OBG Trial Assembly Yard

Segment 11BE/11CE

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated DP706-001-020, Deck Plate I-rib stiffener web Splice. The welder is identified as #500363 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-T-3213-B-U3b.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated OBE11B-006, Side Plate transverse splice. The welder is identified as #040320 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1.

Segment 11CW/11DW

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This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated OBW11C-004, Side Plate transverse splice. The welder is identified as #040320 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-T-2233T.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated OBW11A-005, Edge Plate transverse splice. The welder is identified as #040611 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-P-2213-B-U2-FCM-1.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated OBW11A-001, Edge Plate transverse splice. The welder is identified as #046709 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-P-2213-B-U2-FCM-1.

Segment 11CW

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated SEG069A-011, Side Plate to Bottom Plate hold back weld. The welder is identified as #040609 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-B-T-2231-B-U2-F.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a fillet weld joint. The Weld joint is designated SP169-001-028, Side Plate WT stiffener hold back weld. The welder is identified as #040759 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-T-2132.

Segment 11DW

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated SEG071A-043, Side Plate to Bottom Plate hold back weld. The welder is identified as #040609 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-B-T-2231-B-U2-F.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a fillet weld joint. The Weld joint is designated SP170-001-004, Side Plate WT stiffener hold back weld. The welder is identified as #040759 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-T-2132.

Segment 11CE

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated SEG070A-012, Side Plate to Bottom Plate hold back weld. The welder is identified as #040367 and was observed welding in the 1G (flat) position using approved Welding Procedure

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Specification WPS-B-T-2231-B-U2-F.

Segment 11DE

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated SEG072A-043, Side Plate to Bottom Plate hold back weld. The welder is identified as #040367 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-B-T-2231-B-U2-F.

Cross Beam 17

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated CB3001A-017-005, Side Panel to Bottom Panel. The welder is identified as #066421 and was observed welding in the 2G (horizontal) position using approved Welding Procedure Specification WPS-B-T-32-TC-U4b-F.

For the above mentioned welding activities ZPMC Quality Control (QC) Inspectors are identified as Wang Li Yang and Zhou Peng. The welding variables recorded by QC appeared to comply with the Applicable WPS.

Segment 11AW

This QA Inspector observed ABF personnel performing Magnetic Particle Testing on the Longitudinal Diaphragm to Bottom Plate hold back fillet weld, counter weight side at 11AW/11BW.

Segment 11CW/11DW

This QA Inspector observed back gouging of the Bottom Plate transverse CJP splice root pass.

Segment 11BW/11CW

This QA Inspector observed ABF personnel performing Ultrasonic Testing on the Side Plate transverse CJP splice, cross beam side. D scan was performed.

This QA Inspector observed ABF personnel performing Ultrasonic Testing on the Deck Plate transverse CJP splice, D scan was performed.

Segment 11BE/11CE

This QA Inspector observed the removal of fit up plates by flame cut along the Side Plate transverse CJP splice, cross beam side.

Segment 11DE

This QA Inspector observed fit up of the Bike Path Cantilever at panel point 105.

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Lift 10 West

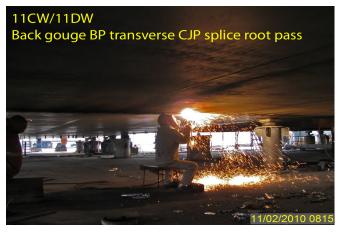
This QA Inspector observed Lift 10 West was relocated to the Dock at the Trial Assembly Yard near the 11 East line.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.









Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:

Hernandez, Dan

Quality Assurance Inspector

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Reviewed By: Dsouza, Christopher QA Reviewer